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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,173	03/09/2001	Chong Seng Cheng	1601457-0004	9334

7590 05/26/2005

White & Case LLP
Attn: Patent Department
1155 Avenue of the Americas
New York, NY 10036

EXAMINER

CHOI, WOO H

ART UNIT	PAPER NUMBER
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2189

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/803,173

Applicant(s)

CHENG, CHONG SENG

Examiner

Woo H. Choi

Art Unit

2189

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-29 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 22-29 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/4/05, 4/28/05.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

2. Claim 22 is objected to because of the following informalities:

Art Unit: 2189

The acronym CD should be spelled out prior to its first appearance. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 22 – 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

5. With respect to claim 22, the specification as originally filed does not support the limitation “a USB plug integrated into the unitary portable data storage device without an intervening cable capable of coupling portable data storage device directly to a USB socket on a computer”. Closest support for the limitation can be found in figure 1, element 1, and figure 2, step 20 and their corresponding descriptions in the specifications. However, while the specification discloses a USB plug and that “the plug 1 of the device 10 is plugged into 20 to a USB socket on the computer” (specification page 5, lines 18 – 19), it does not disclose that the USB plug 1 of the device is capable of coupling **directly** to a USB socket on a computer. Nor does the specification support the limitation “**without an intervening cable**” limitation.

The specification as originally filed does not support the limitation “a USB plug **integrated into the unitary** portable data storage device”. This limitation has been introduced specifically to avoid a prior art reference applied in one of the previous rejections that discloses a two-piece construction of applicant’s claimed device. A limitation that applicant regards as patentably distinct must be supported either specifically or inherently in the specification. There’s neither specific nor inherent support for this **unitary** construction of the claimed device with **integrated plug** in the specification.

The specification as originally filed does not support the limitation “said memory being **non-removable** from the unitary portable data storage device”. Again, this limitation has been added specifically to avoid a prior art reference applied in one of the previous rejections that discloses applicant’s claimed device with removable memory. A limitation that applicant regards as patentably distinct must be supported either specifically or inherently in the specification. There’s neither specific nor inherent support for non-removable fixed memory construction of the claimed device in the specification.

The specification as originally filed does not support the limitation “and having sufficient capacity to enable the unitary portable data storage device to serve as an alternative to a magnetic disk or CD.” While the specification discloses that magnetic disks and CD ROMs are examples of conventional devices, it does not disclose that the claimed non-volatile memory has sufficient capacity to serve as an alternate to a magnetic disk or CD. Capacity of the claimed non-volatile

Art Unit: 2189

memory is not discussed anywhere in the specification. The specification as originally filed does not support the limitation "in a manner to enable the unitary portable data storage device to serve as an alternative to a magnetic disk or CD." Applicants are asked to specifically point out where in the specification these limitations are supported.

6. Claims 23 – 29 contain the deficiencies of their parent claim as discussed above.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 22 – 24, and 26 – 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Miller (US Patent No. 6,038,320).

9. With respect to claims 22 – 24, and 28, Miller discloses a unitary portable data storage device (figure 3) comprising:

Art Unit: 2189

a USB plug (figure 3, 48) integrated into the unitary portable data storage device without an intervening cable capable of coupling the unitary portable data storage device directly to a USB socket on a computer;

a single interface (figure 3, interface between the plug 48 and the controller 42), said interface allowing the unitary portable data storage device to communicate via the USB protocol and being coupled to the USB plug;

a memory controller (42); and

a non-volatile solid-state memory (46), said memory being non-removable from the unitary portable data storage device and having sufficient capacity to enable the unitary portable data storage device to serve as an alternative to a magnetic disk or CD (Miller's device has sufficient capacity to serve as an alternative to other alternative memories, such as a magnetic disk or CD, that can be used to store encrypted passwords); and

the memory controller being coupled between the interface and the memory to control the flow of data between the memory and the USB plug (figure 3, col. 2 line 59 – col. 4, line7) in a manner to enable the unitary data storage device to serve as an alternative to a magnetic disk or CD.

10. With respect to claim 26, the memory controller comprises a micro-controller (col. 2, line 65).

11. With respect to claim 27, the micro-controller includes a read-only memory which stores a program to control the operation of the micro-controller (col. 3, lines 13 – 15).

Art Unit: 2189

12. Claims 22 – 24, and 26 – 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Gilbert (US Patent No. 6,457,099).

Gilbert discloses a unitary portable data storage device (figure 2, 100) comprising:

a USB plug integrated into the unitary portable data storage device without an intervening cable capable of coupling the unitary portable data storage device directly to a USB socket on a computer (col. 7, lines 11 – 30, just like applicant's device, Gilbert's device plugs into a computer, see lines 23 – 24);

a single interface, said interface allowing the unitary portable data storage device to communicate via the USB protocol and being coupled to the USB plug (a USB interface is required for the USB embodiment of Gilbert's device) ;

a memory controller (figure 1, 102, 104);

and a non-volatile solid-state memory (figure 1, 106, 108, 110, 112, see also col. 3, lines 42 – 47 and col. 4, lines 16 – 22), said memory being non-removable from the unitary portable data storage device and having sufficient capacity to enable the unitary portable data storage device to serve as an alternative to a magnetic disk or CD (Gilbert's device has sufficient capacity to store applications);

the memory controller being coupled between the interface and the memory to control the flow of data between the memory and the USB plug in a manner to enable the unitary portable data storage device to serve as an alternative to a magnetic disk or CD.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller in view of Kondo *et al.* (US Patent No. 6,786,417, hereinafter "Kondo").

Miller discloses all of the limitations of the parent claim as discussed above. However, Miller does not specifically disclose a manually operated switch movable between a first position in which writing of data to the memory is enabled, and a second position in which writing of data to the memory is prevented. On the other hand, Kondo discloses a flash memory device with a manually operated switch movable between a first position in which writing of data to the memory is enabled, and a second position in which writing of data to the memory is prevented (figures 3 and 4, element 6 activates the switch, col. 4, line 65 – line 3).

It would have been obvious to one of ordinary skill in the art, having the teachings of Miller and Kondo before him at the time the invention was made, to use the accidental erasure prevention teachings of the compact portable flash memory card of Kondo in the compact portable flash memory card of Miller, in order to prevent accidental erasures of flash memory content (Kondo, col. 1, line 66 – col. 2, line 1).

15. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert in view of Kondo.

Gilbert discloses all of the limitations of the parent claim as discussed above. However, Gilbert does not specifically disclose a manually operated switch movable between a first position in which writing of data to the memory is enabled, and a second position in which writing of data to the memory is prevented. On the other hand, Kondo discloses a flash memory device with a manually operated switch movable between a first position in which writing of data to the memory is enabled, and a second position in which writing of data to the memory is prevented (figures 3 and 4, element 6 activates the switch, col. 4, line 65 – line 3).

It would have been obvious to one of ordinary skill in the art, having the teachings of Gilbert and Kondo before him at the time the invention was made, to use the accidental erasure prevention teachings of the compact portable non-volatile memory card of Kondo in the compact portable non-volatile memory card of Miller, in order to prevent accidental erasures of memory content (Kondo, col. 1, line 66 – col. 2, line 1).

16. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Margalit *et al.* (US Patent No. 6,748,541, hereinafter “Margalit”) in view of Jha *et al.* (US Patent No. 6,407,949, hereinafter “Jha”).

Margalit discloses all of the limitations of the parent claim 22 as follows:

a unitary portable data storage device (figure 1, 10) comprising:

- a USB plug (col. 4, line 23) integrated into the unitary portable data storage device without an intervening cable capable of coupling the unitary portable data storage device directly to a USB socket on a computer (figure 5B);
- a single interface (figure 1, 40), said interface allowing the unitary portable data storage device to communicate via the USB protocol and being coupled to the USB plug;
- a memory controller (30); and
- a non-volatile solid-state memory (50 and 70, col. 4, lines 35 – 41), said memory being non-removable from the unitary portable data storage device and having sufficient capacity to enable the unitary portable data storage device to serve as an alternative to a magnetic disk or CD (Margalit's device has sufficient capacity to serve as an alternative to other alternative memories, such as a magnetic disk or CD, that can be used to store user data); and

the memory controller being coupled between the interface and the memory (see figure 1) to control the flow of data between the memory and the USB plug in a manner to enable the unitary data storage device to serve as an alternative to a magnetic disk or CD.

However, Margalit does not specifically disclose that the non-volatile solid-state memory is divided into a plurality of zones, each of said plurality of zones requiring a unique password for access. On the other hand, Jha discloses these limitations (figure 4).

It would have been obvious to one of ordinary skill in the art, having the teachings of Margalit and Jha before him at the time the invention was made, to use the zoned password protection teachings of the flash memory Jha in the flash memory device of Margalit, in order to

Art Unit: 2189

prevent inadvertent erasures or reprogramming of portions of the flash memory (Jha, col. 11, lines 17 – 19).

Response to Arguments

16. Objection to the priority claims is withdrawn.

17. Applicant's arguments filed March 21, 2005, have been fully considered but they are not persuasive.

First of all, the Examiner does not agreed with Applicant that the specification discloses an **integrated** plug of the USB device that is plugged into a USB socket of a host computer, as Applicant contends. The Examiner agrees that the specification discloses that a USB plug of the disclosed device 10 is plugged into a USB socket on a computer.

Applicant seems to rely on Professor Kim's affidavit to support the position that the claimed limitations are supported by the original disclosure. Professor Kim expresses his opinions in the submitted affidavit. However, personal opinions are of little probative value. Professor Kim may be entitled to import a USB "A"-type plug and a USB "A"-type socket into the sentence "the plug 1 of the device 10 is plugged into 20 to a USB socket on a computer" in his personal opinion, but this does not prove that this single sentence discloses "a **USB plug integrated into** the unitary portable data storage device **without an intervening cable.**" The type of plug (A, B, mini B, proprietary, or others) used for the device and the type of socket used

Art Unit: 2189

in an unspecified computer are not disclosed at all. The specification is silent on the issue of presence or absence of a cable between the disclosed device and an unspecified computer.

Likewise, Professor Kim may be entitled to express his opinion that a single functional block diagram and the claim of the device in a singular form is enough to disclose a **unitary** construction of the device and that a particular component of the device is **non-removable**, but this does not prove that the disclosure supports the claimed limitations. The specification is silent as to whether the construction of the device is unitary and whether the memory is non-removable. The Examiner notes that these limitations were added specifically to overcome prior art references. These new limitations must be supported explicitly, implicitly or inherently. As to the court cases cited by Applicant, they do not appear to be applicable to the instant application. A single device is not the same as a device of unitary construction. Yao reference (US Patent No. 6,385,677), which seems to have caused the new limitations to be added, shows a single device (figure 5) of two-piece construction. When the flash memory 30 is inserted into the adapter 40, it forms a single flash memory device that plugs directly into a computer without any intervening cable as shown in figures 6 and 7.

18. Applicant's argument that Miller's device does not have sufficient capacity to enable the device to serve as an alternate to a magnetic disk or CD is not persuasive. First of all, the capacity of the device is not discussed at all in the specification. Nor does the specification disclose what capacity is sufficient for the device to serve as an alternate to a magnetic disk or a

Art Unit: 2189

CD. Secondly, Miller's device has enough capacity to serve as an alternate to a magnetic disk or CD that stores an encrypted password.

Applicant's argument that Gilbert does not teach or disclose a USB plug integrated into unitary device or a storage device as claimed is an implicit admission that the claimed limitations are not supported by the specification, since the level of Gilbert's disclosure in this regard is comparable to that of Applicant's. Gilbert discloses that the PDAC is connected to a host computer via a USB (col. 7, lines 12 – 16) and that the external PDAC can simply be plugged into any host computers (col. 7, lines 24 – 25). Gilbert discloses the limitations in question as much as Applicants do.


Conclusion

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Woo H. Choi whose telephone number is (571) 272-4179. The examiner can normally be reached on M-F, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2189

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Woo H. Choi
May 23, 2005